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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/522,266	08/10/2005	Steven Kenchington	BWT-70241	8822

24201 7590 12/26/2006  
FULWIDER PATTON  
6060 CENTER DRIVE  
10TH FLOOR  
LOS ANGELES, CA 90045

EXAMINER
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CHANG, CHING

ART UNIT	PAPER NUMBER
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3748

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	12/26/2006	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

**Office Action Summary**

Application No.

10/522,266

Applicant(s)

KENCHINGTON, STEVEN

Examiner

Ching Chang

Art Unit

3748

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-24 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 06/10/2005.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_.

### **DETAILED ACTION**

This Office acknowledges the Preliminary amendment filed on 01/24/2005. New claims 9-24 are added as requested.

#### ***Claim Rejections - 35 USC § 112***

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 1-24 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

More specifically, " apparatus " after " from " in claim 1, and " closed loop " after " in " in claims 8, 14, 19, and 23 are lacking of antecedent basis, thus render the claimed subject matter in claims 1-24 indefinite.

#### ***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

#### ***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

Art Unit: 3748

invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. ***Claims 1-2, 5-8, 11-14, and 19 are rejected under 35 U.S.C. 102(b) as being anticipated by or, in the alternative, under 35 U.S.C. 103(a) as being obvious over Sturman (US Patent 5,829,396).***

Sturman discloses an electrically operated valve (46) for controlling flow of hydraulic fluid comprising: a valve housing (48); a spool (62) slidable in a spool chamber in the valve housing; a first fluid conduit (54) extending through the valve housing for connecting the spool chamber with a source of pressurised fluid; a second fluid conduit (50) extending through the valve housing for connecting the spool chamber with a reservoir of fluid; and a third fluid conduit (52) in communication with the spool chamber which delivers fluid to or receives fluid from an apparatus (40; 42) which uses the hydraulic fluid flow controlled by the valve; wherein: the spool is biased to a rest position by a pair of opposed springs (66); the spool in the rest position thereof closes off the first and second fluid conduits from the spool chamber and thereby prevents flow of fluid to and from the third fluid conduit; the valve has a first electric coil (60) associated with a first end of the spool and which can be activated to displace the spool from the rest position thereof to open the first fluid conduit to the spool chamber, whilst keeping closed the second fluid conduit, and thereby to allow pressurised fluid to flow from the first fluid conduit to the third fluid conduit; and the valve has a second electric coil (58) associated with a second end of the spool and which can be activated to displace the spool from the rest position thereof to open the second fluid conduit to the spool chamber, whilst keeping closed the first fluid conduit, and thereby to allow fluid to

Art Unit: 3748

flow from the third fluid conduit to the second fluid conduit; wherein the pair of opposed springs (66) each apply a force on the spool when the spool valve is in the rest position thereof; wherein the spool has mounted thereon an armature surrounding the first end of the spool and displaceable within the first electric coil and the spool has mounted thereon an armature surrounding the second end of the spool and displaceable within the second electric coil.

Sturman further discloses the said electrically operated valve for controlling flow of hydraulic fluid to and from an actuator (32, 40; 34, 42) of an engine valve operating system, the said actuator which acts on an engine valve (22; 24) and can be extended to open the engine valve and retracted to allow the engine valve to close under the action of an engine valve spring; and an electronic controller (72) for controlling the actuator; wherein the actuator comprises a piston movable in a cylinder; the system comprises additionally a position transducer (70) which produces a position signal indicative of the position of the piston; and the electronic controller uses the position signal to generate an error signal used in closed loop control of the actuator.

Sturman further discloses a method of operating the said electrically operated valve comprising: selecting between the first and second coils and activating the first electric coil when pressurised fluid is to be relayed on to the apparatus using the hydraulic fluid flow and activating the second electric coil when fluid is to be returned from the apparatus using the hydraulic fluid flow back to the reservoir; and controlling the current through and/or voltage across each electric coil when activated in order to control rate of flow of fluid through the valve.

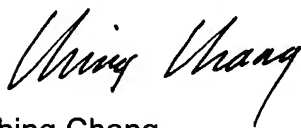
**Conclusion**

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ching Chang whose telephone number is (571)272-4857. The examiner can normally be reached on M-Th, 7:00 AM -5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas Denion can be reached on (571)272-4859. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Patent Examiner

  
Ching Chang